

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: Min Wang

GENERAL INFORMATION:

Name:	Alcan Primary Products Corporation
Address:	P.O. Box 44, Henderson, KENTUCKY 42420
Date application received:	December 13, 1996
SIC/Source description:	3334, Primary and Secondary Aluminum Production
Source ID #:	21-101-00029
Source A.I. #:	1788
Activity #:	APE20050007
Permit number:	V-05-088

APPLICATION TYPE/PERMIT ACTIVITY:

<input checked="" type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
__Administrative	<input checked="" type="checkbox"/> Title V
__Minor	<input checked="" type="checkbox"/> Synthetic minor
__Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input checked="" type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input checked="" type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input checked="" type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☒ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Actual Emissions (TPY)¹	Potential Emissions (TPY)²
PM	1040.262	101754.7
PM₁₀	1036.21	101750.7
CO	26975.7	27088.95
NO_x	211.0	212.0
SO₂	5771.4	5785.8
VOC	33.8	33.8
Lead	7.7E-5	7.7E-5
Individual HAP		
Hydrochloric acid	7.97	7.97
Chlorine	0.30	0.30
Hydrofluoric acid	91.40	9681.71
Total HAP	99.67	9689.98

¹ Based on the potential to emit emission factor and not stack test. These also account for controls.

² Based on the potential to emit emission factor and uncontrolled.

SOURCE DESCRIPTION:

Alcan Primary Products Corporation produces 299,982 tons per year of aluminum ingot. Anodes for replacement in the cells are produced from coke that is crushed, sized and mixed with pitch to form a paste. This is then formed into anode blocks that are baked. Molten aluminum produced in the cells is alloyed and homogenized in gas-fired furnaces before being cast into ingots for shipment.

EMISSION AND OPERATING CAPS DESCRIPTION:

For Sulfur Dioxide, the actual emission from three potlines and Anode Bake Furnaces should not be more than 5262.3 tons per year.

Process rate for electric induction furnaces cannot exceed a limit of total annual process rate of 9,360 tons of cast iron production based on 12 consecutive months.

OPERATIONAL FLEXIBILITY:

Only as allowed by the Primary and Secondary Aluminum MACTs